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UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

District 4

REPORT OF INVESTIGATION  
(UNDERGROUND COAL MINE)

NONFATAL FALL OF RIB ACCIDENT  
(COAL OUTBURST)

Milburn No. 4 mine (ID No. 46-01296)  
Milburn Colliery Company  
Milburn, Fayette County, West Virginia

February 10, 1984

by

Homer S. Grose  
Coal Mine Safety & Health Inspector

Originating Office - Mine Safety and Health Administration  
P. O. Box 112, Mount Hope, West Virginia 25880  
J. M. Krese, District Manager

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## Abstract of Investigation

U.S. Department of Labor  
Mine Safety and Health Administration

Authority—This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 95-173, as amended by Public Law 95-164.

## Section A—Identification Data

1. Title of investigation:	2. Date MSHA investigation started:
Nonfatal Fall of Rib (Coal Outburst)	February 12, 1984
3. Report release date:	4. Mine:
	Milburn No. 4 mine
5. Mine ID number:	6. Company:
46-01296	Milburn Colliery Company
7. Town, County, State:	8. Author(s):
Milburn, Fayette County, WV	Homer S. Grose

## Section B—Mine Information

9. Daily production:	10. Surface employment:
850 tons	9
11. Underground employment:	12. Name of coalbed:
45	No. 2 Gas
13. Thickness of coalbed:	
45-55 inches	

## Section C—Lost Quarter Injury Frequency Rate (HSAC) for:

14. Industry:	15. This operation:
9.97	37.02
16. Training program approved:	17. Mine Profile Rating:
Yes	Not currently rated

## Section D—Originating Office

18. Mine Safety and Health Administration Coal Mine Health and Safety District No. :	Address:
4	POB 112 Mt. Hope, WV 25880

## Section E—Abstract

On Friday, February 10, 1984, at 6:40 p.m., a rib fall accident (coal outburst) occurred across the coal pillar line on the south mains section (015-0) in Milburn No. 4 mine, Milburn Colliery Company, resulting in injuries to Kyle Wade, continuous miner helper. Wade had 2 years intermittent experience as a miner helper with 38 years total mining experience. The cause of the accident was faulty pillar recovery methods resulting in abnormal pressures being applied to the coal pillars causing coal from the ribs to be violently hurled into the active working areas.

## Section F—Mine Organization

Company officials:	Name	Address
19. President:	C. Lynch Christian, Jr.	POB 638, Lynchburg, VA 24505
20. Superintendent:	Charlie Couch	POB 8, Burnwell, WV 25034
21. Safety Director:	Gerald Lucas	POB 8, Burnwell, WV 25034
22. Principle officer—H&S:	Charles Buckland	POB 8, Burnwell, WV 25034
23. Labor Organization:	UMWA, District 17	POB 1313, Charleston, WV
24. Chairman—H&S Committee:	Russell Edwards	Rt. 1, Box 97, Oak Hill, WV 25901

### Commentary

On Friday, February 10, 1984, at 4 p.m., the afternoon (second) shift crew entered the mine and traveled to the south mains (015-0) section. After arriving on the section, Steve Smith, section foreman, examined the pillar line and instructed the crew to install additional roadway and breaker posts in order that the pushout portion remaining in No. 3 pillar between Nos. 2 and 3 entries could be extracted. The additional posts were installed and Harold Messer, continuous miner operator, assisted by Kyle Wade, continuous miner helper, trammed the continuous mining machine to the No. 3 pillar and completed loading the pushout.

After completing the pushout portion of the No. 3 pillar block, Messer backed the continuous mining machine to the crosscut outby the pillar line and trammed toward the No. 5 entry on the right side of the section, passing the Nos. 4 and 5 pillar blocks which were intact. Arriving at the No. 5 entry, the continuous mining machine was stopped to permit roadway and breaker posts to be installed so that the No. 6 coal pillar between No. 5 entry and 1 right panel could be recovered. The posts were installed and Messer trammed the continuous mining machine about 20 feet inby the last open crosscut on the pillar line and started extracting coal from the No. 6 pillar block. As the continuous mining machine made the initial cut in the No. 6 pillar, bumps started to occur and continued during extraction of the first cut until 6:40 p.m., when a coal outburst occurred causing coal from the ribs to be violently hurled into the roadway leading into the No. 6 pillar for a distance of 90 feet outby the working face. The roadways were filled with loose coal to a depth of 2-3 feet, thereby preventing removal of the shuttle car and continuous mining machine.

The concussion from the outburst knocked the eight crew members to the mine floor. One crew member was located approximately 2 crosscuts outby the No. 6 pillar block and the other crew members were located within 50 feet of the No. 6 pillar block.

Kyle Wade, Jr. (injured) was installing additional roadway timbers in No. 5 entry about 50 feet outby the No. 6 pillar split and was hit by the exploding coal rib. After the dust caused by the outburst cleared, Wade, along with the other crew members, walked outby two crosscuts where Smith, foreman, accounted for all the crew members. Wade informed Smith that he was bruised. Smith then transported Wade to the surface and then to an area hospital where he was examined, treated, and released.

### Discussion and Evaluation

1. According to statements from miners with 10-20 years of experience in this mine, the bumps and outburst that have occurred in the 3 months prior to this accident were more severe than any previously experienced throughout the history of this mine.

2. The miners stated that outbursts of coal from face and ribs would occur in conjunction with the bumps, and on one occasion Delmar Kees, shuttle car operator, was covered with coal as a result of an outburst which caused his head to contact the shuttle car frame resulting in injuries requiring stitches.
3. A mine map overlay location by coordinates indicated that the abandoned mines in both coal seams below the accident area in the active mine had been recovered by pillar extraction.
4. The investigation revealed that two coal seams below the No. 2 Gas (active mine) had been mined previously. Maps indicated the elevation of the active mine at 2,086 feet with coal seam elevations of 1,988 feet and 1,886 feet, respectively, at the coal seams which contained the abandoned mines.
5. Information from surface drilled diamond bore holes indicated sandstone 12 to 90 feet in thickness immediately above the active mine with sandstone forming the strata beneath the coal.
6. The elevation of the coal seam being mined was 2,086 feet with a surface elevation of 2,845 feet above the area where the coal outbursts were occurring.
7. The miners stated that they were knocked to the mine floor on several occasions during the past three months by pressure bumps and the continuous mining machine was knocked from the coal face with such force that the cutting heads were damaged to the extent that necessitated replacement on two occasions.
8. The investigation revealed that coal pillar recovery had been performed in the 2 left and 1 right panels off the south main resulting in the pillar line in the south main heading section being 200 feet inby the areas of second mining in the panels on each side of south mains.

#### Findings of Fact

The method of mining followed on the pillar line on south mains section exposed the miners to unusual dangers caused by faulty pillar recovery methods, in that a straight pillar line was not maintained. Coal pillars were left inby the pillar line; portions of pillars were left inby the pillar line; and extraction of pillar blocks was performed on pillars not in sequence across the active pillar line resulting in a violation of Section 75.201, Title 30, Code of Federal Regulations.

#### Conclusion

The accident and resultant injury occurred when management failed to recognize the dangers of coal outbursts and failed to develop and follow a system of retreat mining designed to prevent undue pressure on the coal pillars.

*Homer S. Grose*

Homer S. Grose

Approved by:

  
Subdistrict Manager

  
J. M. Krese



## APPENDIX

List of persons furnishing information and/or present during the investigation:

Milburn Colliery Company Officials

Charles Couch	Superintendent
Rick Bonham	Engineer
Gerald Lucas	Safety Director
Albert R. Christian	Administrative Manager
Steve R. Smith	Section Foreman
Kenneth Messer	Section Foreman
Charles Buckland	Mine Foreman

Milburn Colliery Company Employees

Harold G. Messer	Continuous Miner Operator
Roger Sharp	Continuous Miner Helper
Delmar Kees	Shuttle Car Operator
Russell DeLung	2nd shift Continuous Miner Operator

Representatives of Miners  
United Mine Workers of America

William "Bolts" Willis	OHSR International Union
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West Virginia Department of Mines

Melvin Judy	Mine Inspector (Roof Control)
Richard K. Crowl	Mine Inspector

Mine Safety and Health Administration

George S. Vargo	Supervisory Coal Mine Safety & Health Inspector
Darlie F. Anderson	Coal Mine Safety & Health Inspector (Roof Control)
Fred H. Ryan	Supervisory Mine Safety & Health Specialist (Roof Control)
James E. Cline	Coal Mine Safety & Health Inspector (Roof Control)
Leighton C. Farley, Jr.	Mine Safety & Health Specialist
Homer S. Grose	Coal Mine Safety & Health Inspector



## Data Sheet

U.S. Department of Labor  
Mine Safety and Health Administration

## Section A—Victim Data

1. Name	2. Sex	3. Social Security Number
Kyle Wade, Jr.	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	236-38-7473

4. Age	5. Job Classification
57	Miner Helper

6. Experience at this Classification	7. Total Mining Experience
2 years	Over 30 years

8. What activity was being performed at time of accident?	9. Victim's Experience at this Activity	10. Was victim trained in this task?
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Miner Helper

2 years

Yes

## Section B—Victim Data for Health and Safety Courses/Training Received (related to accident)

Date Received

11.

Annual Retraining

3/8/83

12.

13.

14.

## Section C—Supervisor Data (supervisor of victim)

15. Name	16. Certified
Steve Smith	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

17. Experience as Supervisor	18. Total Mining Experience
------------------------------	-----------------------------

10 years

13 years

## Section D—Supervisor Data for Health and Safety Courses/Training Received (related to accident)

Date Received

19.

Annual Retraining

3/8/83

20.

EMSA First-Aid

12/20/83

21.

22.

23. When was the supervisor last present at accident scene prior to the accident?

24. What did he do when he was there?

Was on site when accident occurred

Discussed roof supports

25. When was he last in contact with the victim?	26. Did he issue instructions relative to the accident?
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Approximately 30 minutes prior to accident

No

27. Was he aware of or did he express an awareness of any unsafe practice or condition?

No

Section I (Coal Only)

MSHA and/or State Certification and/or Qualification

Mine ID 46-01296Date Training  
Plan Approved 9/19/79Date Training  
ReceivedDate Training  
Received\* ☒ Certified Person  
(Underground) 1973☐ Dust\* ☐ Certified Person  
(Surface)☐ Dust (Calibration)\* ☒ Methane & Oxygen  
Deficiency Testing 3/8/83☐ Noise\* ☐ Electrical\* ☐ Impoundments\* ☐ Energized Surface  
High Voltage\* ☐ Hoisting Engineer

\*Annual Retraining Required

Section II (Metal/Non-Metal and Coal)

MSHA Training Programs Completed

Date of Hire 1946Date Training Plan Approved 1/16/79Required Training  
(Victim)\*Date Training  
ReceivedRequired Training  
(Victim)Date Training  
Received☐ New Miner (U.G.)☐ Hazard Training  
(U.G.)☐ New Miner (Sur.)☐ Hazard Training  
(Sur.)☐ Newly Employed  
Experienced (U.G.)☐ Newly Employed  
Experienced (Sur.)Task Training  
Specify Type:☒ Annual Refresher  
(U.G.) 3/8/83☐ Annual Refresher  
(Sur.)Section III

Company Training Program Completed:

Training

OJT/Formal

Instructor

Date  
Completed


Section IV

Did victim have training specifically related to the task being performed at the time of the accident?

☒

YES

☐

NO

WHEN? 3/8/83

By Whom: \_\_\_\_\_

How Was Training Given: \_\_\_\_\_

Section V

Recommend Training Plan Evaluation by Education and Training Office?

☐

YES

☒

NO

## Accident, Injury and Illness Report

U.S. Department of Labor  
Mine Safety and Health Administration



Form Approved, OMB No. 044-R1865, Expires December 1982.

## Section A - Identification Data

MSHA ID Number 46-01296 Contractor I.D. \_\_\_\_\_ Report Category ☐ Metal/Nonmetal Mining ☒ Coal Mining ☐ Check here if report pertains to contractor.

Mine Name

No. 4

Company Name

Millburn Colliery Company

## Section B - Complete for Each Reportable Accident Immediately Reported to MSHA

1. Accident Code (circle applicable code - see instructions)  
 01 - Death 02 - Serious Injury 03 - Entrapment  
 04 - Inundation 05 - Gas or Dust Ignition 06 - Mine Fire 07 - Explosives 08 - Roof Fall  
 09 - Outburst 10 - Impounding Dam 11 - Hoisting 12 - Offsite Injury

2. Name of Investigator

3. Date Investigation Started

4. Steps Taken to Prevent Recurrence of Accident

Month	Day	Year

## Section C - Complete for Each Reportable Accident, Injury or Illness

5. Circle the Codes Which Best Describe Where Accident/Injury/Illness Occurred (see instructions)

(a) Surface Location: 01 Surface at Underground Mine 02 Mill, Preparation Plant, etc. 03 Strip/Open Pit Mine 04 Surface Auger Operation  
 05 Culin Bank/Refuse Pile 06 Dredge Mining 12 Other Surface Mining 17 Independent Shops (with own MSHA ID) 99 Office Facilities  
 (b) Underground Location: 01 Vertical Shaft 02 Slope/Inclined Shaft 03 Face 04 Intersection 05 Underground Shop/Office (06) Other  
 (c) Underground Mining Method: 01 Longwall 02 Shortwall 03 Conventional Stopping (04) Continuous Miner 06 Hand 07 Caving 08 Other

6. Date of Accident

7. Time of Accident

8. Time Shift Started

Month	Day	Year
<u>02</u>	<u>03</u>	<u>84</u>

<u>2:00</u>	<input type="checkbox"/> am <input checked="" type="checkbox"/> pm
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<u>7:30</u>	<input checked="" type="checkbox"/> am <input type="checkbox"/> pm
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9. Describe Fully the Conditions Contributing to the Accident/Injury/Illness, and Quantify the Damage or Impairment WAS RUNNING  
SCAR WHEN PRESSURE BUMP OCCURRED CAUSING IT TO HIT A WORKER  
IN A SHUTTLE CAR. THE CAR WAS HIT BY THE SCAR AND IT  
WENT AGAINST THE CAR AND IT WAS HIT BY THE SCAR AND IT  
WENT AGAINST THE CAR AND IT WAS HIT BY THE SCAR AND IT

10. Equipment Involved

Type

Manufacturer

Model Number

SCARJOY215C

11. Name of Witness to Accident/Injury/Illness

12. Number of Reportable Injuries or Illnesses Resulting from This Occurrence

01

13. Name of Injured/Ill Employee

14. Sex

15. Date of Birth

☒ Male  
☐ Female

Month	Day	Year
<u>09</u>	<u>29</u>	<u>26</u>

16. Last Four Digits of Social Security Number

17. Regular Job Title

18. Check if this injury/illness resulted in death.

19. Check if injury/illness resulted in permanent disability (include amputation, loss of use, &amp; permanent total disability).

6775SCAR OPER.

20. What Directly Inflicted Injury or Illness?

21. Nature of Injury or Illness

COAL BUMP/BURSTLACERATION

22. Part of Body Injured or Affected

23. Occupational Illness (circle applicable code - see instructions)

21 Occupational Skin Diseases

22 Dust Diseases of the Lungs 23 Respiratory Conditions (toxic agents) 24 Poisoning (toxic materials)

25 Disorders (physical agents)

26 Disorders (repeated trauma)

(29) Other

24. Employee's Work Activity When Injury or Illness Occurred

Experience

Years

Weeks

25. Experience in This Job Title

0838

26. Experience at This Mine

1010

27. Total Mining Experience

1010

## Section D - Return to Duty Information

Answer 30 &amp; 31 when case is closed

28. Permanently Transferred or Terminated (if checked, complete items 29, 30 &amp; 31)

29. Date Returned to Regular Job at Full Capacity (or Item 28)

30. Number of Days Away from Work (if none, enter 0)

31. Number of Days Restricted Work Activity (if none, enter 0)

Month	Day	Year
<u>02</u>	<u>06</u>	<u>84</u>

00

Person Completing Form (name)

Title

Date This Report Prepared (month, day, year)

Area Code and Phone Number

02-03-84304-595-2166

MSHA Form 7000-1, Feb. 80 (revised)

For Official Use Only

Degree

Accident Type

Accident Class

Scheduled Charge

Keyword

MSHA

MOUNT HOPE, W. VA.

1984